Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

1. (Currently Amended) A method of ~~serial communication for use with a battery management system~~ controlling a battery management unit, comprising:

~~providing a sequence of pulses corresponding to a serial protocol over a serial port~~;

receiving ~~the~~ a sequence of pulses from ~~the~~ a serial port corresponding to a serial protocol;

interpreting the sequence of pulses received according to the serial protocol wherein the serial protocol defines a set of battery management commands based at least on a number of pulses in the sequence ~~each signal in the serial protocol is defined by the number of pulses in the sequence.~~; and

AH

transmitting a battery management unit command, the command operable to control components within a battery management unit.

2. (Original) The method of claim 1, wherein the pulse width for each pulse in a signal is substantially the same.

3. (Currently Amended) The method of claim 1, wherein the time duration between signals is at least two times longer than ~~the~~ a width of a pulse.

4. (Original) The method of claim 1, wherein a zero signal corresponds to a sequence of two pulses.

5. (Original) The method of claim 1, wherein a one signal corresponds to a sequence of three pulses.

6. (Original) The method of claim 1, wherein an acknowledge signal corresponds to a sequence of four pulses.

7. (Original) The method of claim 1, wherein a start signal corresponds to a sequence of five pulses.

8. (Currently Amended) The method of claim 1, wherein each pulse in the sequence remains low for ~~the~~ a same time interval.

9. (Currently Amended) The method of claim 1, wherein each pulse in the sequence remains high for ~~the~~ a same time interval.

AH Cont.

10. (Currently Amended) A serial ~~communication~~ apparatus used to ~~communicate~~ transmit and receive commands for ~~with~~ a battery management unit ~~system~~, comprising:

a port ~~capable of sending~~ operable to send and ~~receiving~~ receive pulses over a single conductor; and

serial interface logic compatible with a serial protocol and ~~capable of generating~~ operable to generate and detect ~~detecting signals~~ a sequence of pulses on the port, interpret the sequence of pulses according to the serial protocol, and transmit a corresponding battery management unit command to a controller. ~~and communicating the signals with an internal bus in the battery management system wherein each signal in the serial protocol is defined by a specific number of pulses.~~

11. (Currently Amended) The apparatus of claim 10, [[8]] wherein the pulse width for each pulse in a signal is substantially the same.

12. (Currently Amended) The apparatus of claim 10, [[8]] wherein the time duration between signals is at least two times longer than ~~the~~ a width of a pulse.

13. (Currently Amended) The apparatus of claim 10 [[8]], wherein a zero signal corresponds to a sequence of two pulses

14. (Currently Amended) The apparatus of claim 10 [[8]], wherein a one signal corresponds to a sequence of three pulses.

15. (Currently Amended) The apparatus of claim 10 [[8]], wherein an acknowledge signal corresponds to a sequence of four pulses.

16. (Currently Amended) The apparatus of claim 10 [[8]], wherein a start communication signal corresponds to a sequence of five pulses.

17. (New) A method of controlling a battery management unit, comprising;

transmitting a start command corresponding to a sequences of pulses to a battery management unit through a serial port;

receiving an acknowledgement sequence of pulses from the battery management unit;

transmitting a command byte and an address associated with a byte of data to be accessed in memory to the battery management unit through the serial port as a sequence of pulses corresponding to a serial protocol; and

receiving an acknowledgment sequence of pulses from the battery management unit.

18. (New) The method of claim 1, wherein a battery management unit command includes read/write commands, arithmetic commands, and interrupt commands.

19. (New) The apparatus of claim 10, wherein a battery management unit command includes read/write commands, arithmetic commands, and interrupt commands.